

2-Propanone, 1-phenoxy-

Other names:	Phenoxyacetone Phenoxyethyl methyl ketone 1-Phenoxy-2-propanone 1-Phenoxyacetone Phenoxy-2-propanone
Inchi:	InChI=1S/C9H10O2/c1-8(10)7-11-9-5-3-2-4-6-9/h2-6H,7H2,1H3
InchiKey:	QWAVNXZAQASOML-UHFFFAOYSA-N
Formula:	C9H10O2
SMILES:	CC(=O)COc1ccccc1
Mol. weight [g/mol]:	150.17
CAS:	621-87-4

Physical Properties

Property code	Value	Unit	Source
gf	-96.61	kJ/mol	Joback Method
hf	-237.36	kJ/mol	Joback Method
hfus	15.89	kJ/mol	Joback Method
hvap	47.06	kJ/mol	Joback Method
log10ws	-1.71		Crippen Method
logp	1.654		Crippen Method
mcvol	121.350	ml/mol	McGowan Method
pc	3439.94	kPa	Joback Method
ripol	1956.00		NIST Webbook
tb	502.70	K	NIST Webbook
tc	724.46	K	Joback Method
tf	289.77	K	Joback Method
vc	0.456	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	256.39	J/mol×K	508.29	Joback Method
cpg	269.00	J/mol×K	544.32	Joback Method
cpg	280.90	J/mol×K	580.35	Joback Method

cpg	292.11	J/molxK	616.37	Joback Method
cpg	302.63	J/molxK	652.40	Joback Method
cpg	312.50	J/molxK	688.43	Joback Method
cpg	321.72	J/molxK	724.46	Joback Method
dvisc	0.0023343	Paxs	289.77	Joback Method
dvisc	0.0012799	Paxs	326.19	Joback Method
dvisc	0.0007918	Paxs	362.61	Joback Method
dvisc	0.0005347	Paxs	399.03	Joback Method
dvisc	0.0003856	Paxs	435.45	Joback Method
dvisc	0.0002925	Paxs	471.87	Joback Method
dvisc	0.0002308	Paxs	508.29	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C621874&Units=SI

Legend

cpg:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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